ABSTRACT

Where synchronization in time and frequency in the downstream channel has been previously carried out, and determined by the sending of synchronization sequences (3) in a communication between a head-end (1) and user equipment (2); the present invention is characterized because it corrects sampling frequency in the user equipments (2) by starting from the estimation carried out during frequency synchronization in the downstream channel, to synchronize the upstream channel in frequency, removing the need for the head-end to make corrections in reception in the upstream channel. The user equipment (2) estimates (9) the moment the OFDM symbols (7) should be sent to the head-end (1) so that these are received by it at previously fixed moments in time. Furthermore, this invention includes interrogation of the user equipment (2), which allows them to place requests for access to the upstream channel with the head-end then making the distribution between the requests received. It is applicable to sending of data in bi-directional communication over the electric network.